

Date: Friday, 11/18/2005 3:03:59 PM
 User: Linda Lacelle

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	WEARSHOE
Job Number :	24845	Part Number :	D265615
Estimate Number :	10613	Drawing Number :	D2656 REV D
P.O. Number :	N/A	Project Number :	N/A
This Issue :	11/18/2005	S.O. No. :	N/A
Prsht Rev. :	NC	Drawing Revision :	D
First Issue :	N/A	Material :	N/A
Previous Run :	N/A	Due Date :	12/20/2005
Written By :	SEE COMMENT BELOW		
Checked & Approved By :	SEE COMMENT BELOW		
Comment :	Est: D 02.10.25 Re-format KJ		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: 146

Email or ship DXF file to vendor

Laser Cut per Dwg D2656 flat pattern D2656-15

Material release note required

LC 05-11-22

2.0

D265615F

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 50.0000 Each(s)
 Wearplate

3.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material release note is attached

DL 05/12/30 50

4.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Inspect dimensions per template D2656-15T1

Jul 01-10 100

5.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Deburr if necessary.

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
06-01-10	4	TOOK 1 for template. Identify AS DT 8836. permanent change	J	06-01-11	1		

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: Date: 04/02/13
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 11/18/2005 3:03:59 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARSHOE

Job Number: 24845

Part Number: D265615

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

1-Form on Brake as per Dwg D2656 using Jigs DT8261 and DT8326

2-Form joggle as per Dwg D2656 using Jig DT8158

3-Identify as D2656-15

SB 06/01/25

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Joc. 01-25

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

q.m 06-02-10

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FC 060210

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: FD

FC 060210

11.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

SUC 06/02/23

49

06/02/23

Job Completion



W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Nov 17, 2005
03:30 pm

Work Order No	: 0024845	Department Code:	
Project Name	: D2656-15	Burden Flags	: NNNNNNN
Project For	: WK550	WO Status	: Open
Work Order Type	: Main	Invoice State	: Not Invoiced
Main WO Number	:	Invoice Date	:
House Part Number	: D2656-15	Invoice Number	:
Description	: Wearplate	Invoice Amount	: 0.00
Manufactured	: Yes		
Amount Req'd	: 50	Order Entry No	:
Amount Done	: 0	OE Value	: 0.00
Start Date	: 11-17-05		
Est Finish Date	: 12-20-05	Est Margin	: 0.000%
Act Finish Date	:	Actual Margin	: 0.000%
Drawings Req'd	: No		
Ok for Approval	:		
Approval Rec'd	:	\$0 Posted to Finished Goods	

	Estimated	Actual	Var. %	Posted	To Post
=====					
Material Cost	: 0.00	0.00	0.00	0.00	0.00
Engineering Hours	: 0.00	0.00	0.00		
Engineering Cost	: 0.00	0.00	0.00	0.00	0.00
Production Hours	: 0.00	0.00	0.00		
Production Cost	: 0.00	0.00	0.00	0.00	0.00
Packaging Hours	: 0.00	0.00	0.00		
Packaging Cost	: 0.00	0.00	0.00	0.00	0.00
OverHead Hours	: 0.00	0.00	0.00		
OverHead Cost	: 0.00	0.00	0.00	0.00	0.00
CNC Hours	: 0.00	0.00	0.00		
CNC	: 0.00	0.00	0.00	0.00	0.00
Misc. Hours	: 0.00	0.00	0.00		
Misc.	: 0.00	0.00	0.00	0.00	0.00
=====					
Burden	: 0.00	0.00	0.00		
=====					
Total Cost	: 0.00	0.00	0.00		
Margin	: 0.000	0.000			
Selling Cost	: 0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done	: 0.00	0.00
Profits/(Loss)	: 0.00	0.00

INTEGRIS METALS
 444 MTR MINNEAPOLIS
 2010

INSPECTION CERTIFICATE

MATERIAL TEST/INSPECTION CERTIFICATES

90229754

YIEH MAU CORP.
 YEN MAU CORP.

INVOICE NO.
 COMMODITY

FORM 665
 PRIME COLD ROLLED STAINLESS STEEL SHEET AISI 304 NO.4 (SIC)
 FINISH, WITH 100 MICFILM ON MAIN SIDE, WITH BACK PASS,
 SLITTED EDGE AISI 304, 2B FINISH, WITH PAPER INTERLEAVED,
 SLITTED EDGE.

SPECIFICATION:
 CUSTOMER

YIEH MAU
 INTEGRIS METALS LTD

工廠: 嘉華基港竹脚廣安街345號
 345, SHUN AN RD. LU CHU SIANG
 KAOHSIUNG TAIWAN R.O.C.
 TEL: (07) 8672885 FAX: (07) 8673008
 CERTIFICATE NO: 9111182
 DATE OF ISSUE: 1/18/2004

SPECIFICATION :		CUSTOMER :		AISI 304 INTEGRIS METALS LTD														
(ITEM NO) SIZE	NO.	Weight (N.W.)		Heat No.	ID NO.	Physical Properties Tensile Test GL-50 m/m					Chemical Composition (%)							
		KGS	LBS			Y.S. (N/mm ²)	T.S. (N/mm ²)	E.L. (%)	HRB	HV	C x100	SI x100	Mn x100	P x1000	S x1000	NI x100	Cr x100	N x100
AISI 304 2B (7425-4228)																		
24GA/48"X120"	1	1,465	3,230	YU231320	3AS44453B-21	258	685	56	81	156	4.8	51	119	24	2	804	1821	2.7
24GA/48"X120"	1	1,464	3,228	YU231320	3AS44453B-22	258	685	56	81	156	4.8	51	119	24	2	804	1821	2.7
22GA/48"X96" (7425-5860)	1	1,464	3,228	YU230510	38S37608B-51	280	673	53	82	162	5.4	50	126	26	3	815	1819	2.4
22GA/48"X96" (7425-5850)	1	1,375	3,031	YU230510	38S37608B-52	280	673	53	82	162	5.4	50	126	26	3	815	1819	2.4
22GA/48"X120" (7425-5850)	1	1,375	3,031	YU230510	38S37608B-52	280	673	53	82	162	5.4	50	126	26	3	815	1819	2.4
18GA/48"X96" (7425-2819)	1	1,445	3,186	YU134875	3AS43434A-1	312	666	61	82	161	4.1	49	112	24	2	809	1821	2.8
18GA/48"X96" (7425-2819)	1	1,497	3,300	YU231065	3AS42732-4	301	664	49	84	166	3.7	40	116	27	5	810	1824	3.7
18GA/48"X120" (7425-2819)	1	1,453	3,203	YU231066	3AS42732-5	301	664	49	84	166	3.7	40	116	27	5	810	1824	3.7
18GA/48"X120"	1	1,455	3,208	YU231066	3AS42732-6	301	664	49	84	166	3.7	40	116	27	5	810	1824	3.7
16GA/48"X120" (7425-5166)	1	1,423	3,137	YU231143	3AS42886A-6	302	650	53	82	159	4.5	52	123	28	4	810	1822	2.7
16GA/48"X120"	1	1,424	3,139	YU231143	3AS42886A-7	302	650	53	82	159	4.5	52	123	28	4	810	1822	2.7
16GA/48"X120"	1	1,420	3,131	YU231143	3AS42886B-1	302	650	53	82	159	4.5	52	123	28	4	810	1822	2.7
16GA/48"X96" (7425-7049)	1	1,441	3,177	YU231075	3AS42917A-1	302	650	52	83	162	4.2	48	119	28	6	806	1813	3.4
16GA/48"X96" (7425-8053)	1	1,441	3,177	YU231075	3AS42917A-2	302	650	52	83	162	4.2	48	119	28	6	806	1813	3.4
14GA/48"X120"	1	1,420	3,131	YU231075	3AS42917A-3	302	650	52	83	162	4.2	48	119	28	6	806	1813	3.4
14GA/48"X120"	1	1,420	3,131	YU231075	3AS42917A-4	302	650	52	83	162	4.2	48	119	28	6	806	1813	3.4
14GA/60"X96" (7425-8244)	1	1,446	3,188	YU135202	3AS45623A-211	301	641	53	81	157	5.1	51	114	30	9	806	1822	3
14GA/60"X120" (7425-8277)	1	1,405	3,097	YU135202	3AS45623A-213	301	641	53	81	157	5.1	51	114	30	9	806	1822	3
14GA/60"X120"	1	1,540	3,405	YU135202	3AS45623A-214	301	641	53	81	157	5.1	51	114	30	9	806	1822	3

Remarks: NO MERCURY CONTAMINATION
 WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS
 BEEN MADE IN ACCORDANCE WITH THE RULES OF THE MILL CERTIFICATE.

Send test report for all Heat NO.

PRODUCT IN ACCORDANCE WITH ASTM A240, A480,
 A362R, ASME SA240, Q35766D.

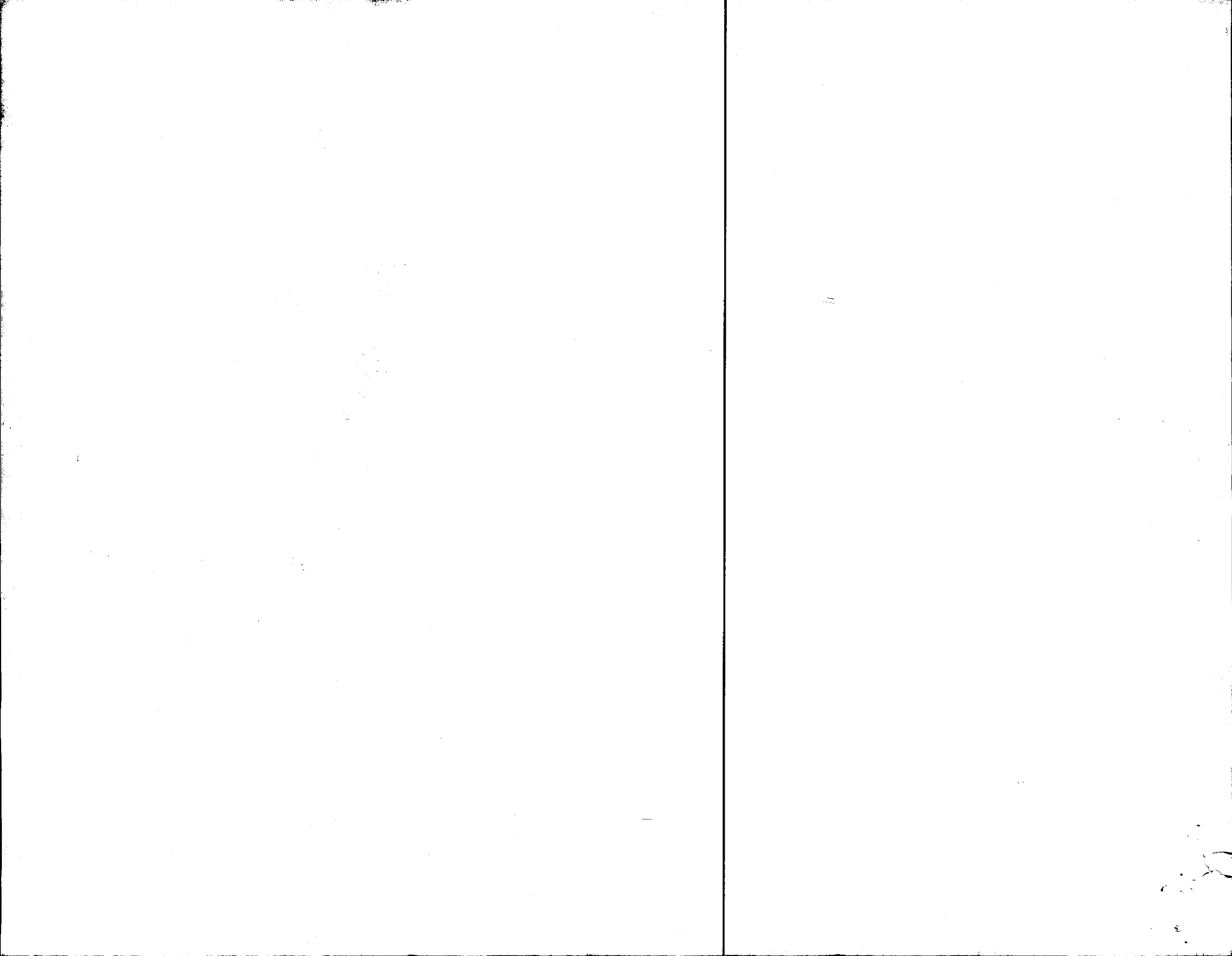
YIEH MAU CORP.

Signature: *Lin Van Hing*
 Manager of Quality Assurance Section

20 ga 304 2455

(0.037)

po # 267 196





New Zealand Steel Limited
Glenbrook, South Auckland
Postal: Private Bag 92121, Auckland, New Zealand
Telephones: (09) 375 8999 / 375 8111 Auckland
(09) 235 8089 / 235 3535 Waiuku
Fax: (09) 375 8959

TEST CERTIFICATE

Ref: 5379/23850

CUSTOMER	Wilkinson	P50505DI002	SPECIFICATION	ASTMA1008 CS Type A	CERTIFICATE No	TC116858
CUSTOMER O/N	90-21N-742		PRODUCT	CRA WIDE COIL	PAGE	1 of 1
MILL O/N	486968		DIMENSIONS	0.033" x 48" x Coil	DATE	19 August 2005

PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT														MECHANICAL TESTS (TEST SPECIFICATION - ASTMA370)												
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE ()	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH				
		x100				x1000										x10000		x100									()	(feet)
R9-466080-00	845423	6	TR	21	11	16	17	20	16	2	3	1	3					180°	Good				50		2700			
R9-466081-00	845423	6	TR	21	11	16	17	20	16	2	3	1	3					Good				50		2700				
R9-466082-00	845253	6	1	21	10	12	28	30	15	2	3	1	3					Good				47		2651				
R9-466083-00	845253	6	1	21	10	12	28	30	15	2	3	1	3					Good				47		2651				

YIELD	GAUGE LENGTH (G.L.)	PLASTIC STRAIN RATIO (r)	IMPACT TEST	CARBON EQUIVALENT VALUE (CE)
(A)=0.2% PROOF STRESS	(A)=200mm (C)=80mm (E)=2"	(A)=0 (C)=r45	(A)=10mm x 10mm (B)=7.5mm x 10mm	(A)=C+Mn/6 (B)=C+Mn/8+(Cr+V+Mo)/5+(Cu+Ni)/15
(B)=LOWER YIELD STRESS	(B)=50mm (D)=5.65 x So (F)=8"	(B)=r80 (D)=(r0+r30+2r45)/4	(C)=25mm x 5mm (D)=2.5mm x 10mm (E)=5mm x 10mm	(C)=C+Mn/6+Si/24 (D)=

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED *Satish Misra*
QC METALLURGIST

20 gms

PO# 267, 146,



New Zealand Steel Limited
Glenbrook, South Auckland
Postal: Private Bag 92121, Auckland, New Zealand
Telephones: (09) 375 8990 / 375 8111 Auckland
(09) 235 8069 / 235 3535 Waiuku
Fax: (09) 375 8050

TEST CERTIFICATE

Ref: S21022495

CUSTOMER	Wilkinson	P50323 DI001	SPECIFICATION	ASTMA1008 CS Type A	CERTIFICATE No	TC112397
CUSTOMER O/N	90-21N-686		PRODUCT	CRA WIDE COIL	PAGE	1 of 1
MILL O/N	480737		DIMENSIONS	0.055" x 48" x Coil	DATE	09 June 2005

PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT															MECHANICAL TESTS (TEST SPECIFICATION - ASTM A370)							
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE ()	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH
		x100			x1000										x10000		x100		180°			GL =	HRB	()
R9-459713-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				54		1585
R9-459714-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				54		1457
R9-459715-00	641513	5	TR	18	9	18	12	17	15	1	6	1	1					Good				48		1375
R9-459716-00	641513	5	TR	18	9	18	12	17	15	1	6	1	1					Good				48		1473
R9-459717-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				48		1631
R9-459718-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				48		1093
R9-459719-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				50		1562
R9-459720-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				50		1535
R9-460380-00	641761	4	TR	20	13	17	12	18	25	5	8	1	1					Good				50		1581
R9-460381-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				49		1562
R9-460382-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				49		1503
R9-461458-00	642309	2	TR	18	10	20	11	17	19	1	6	1	1					Good				48		1785

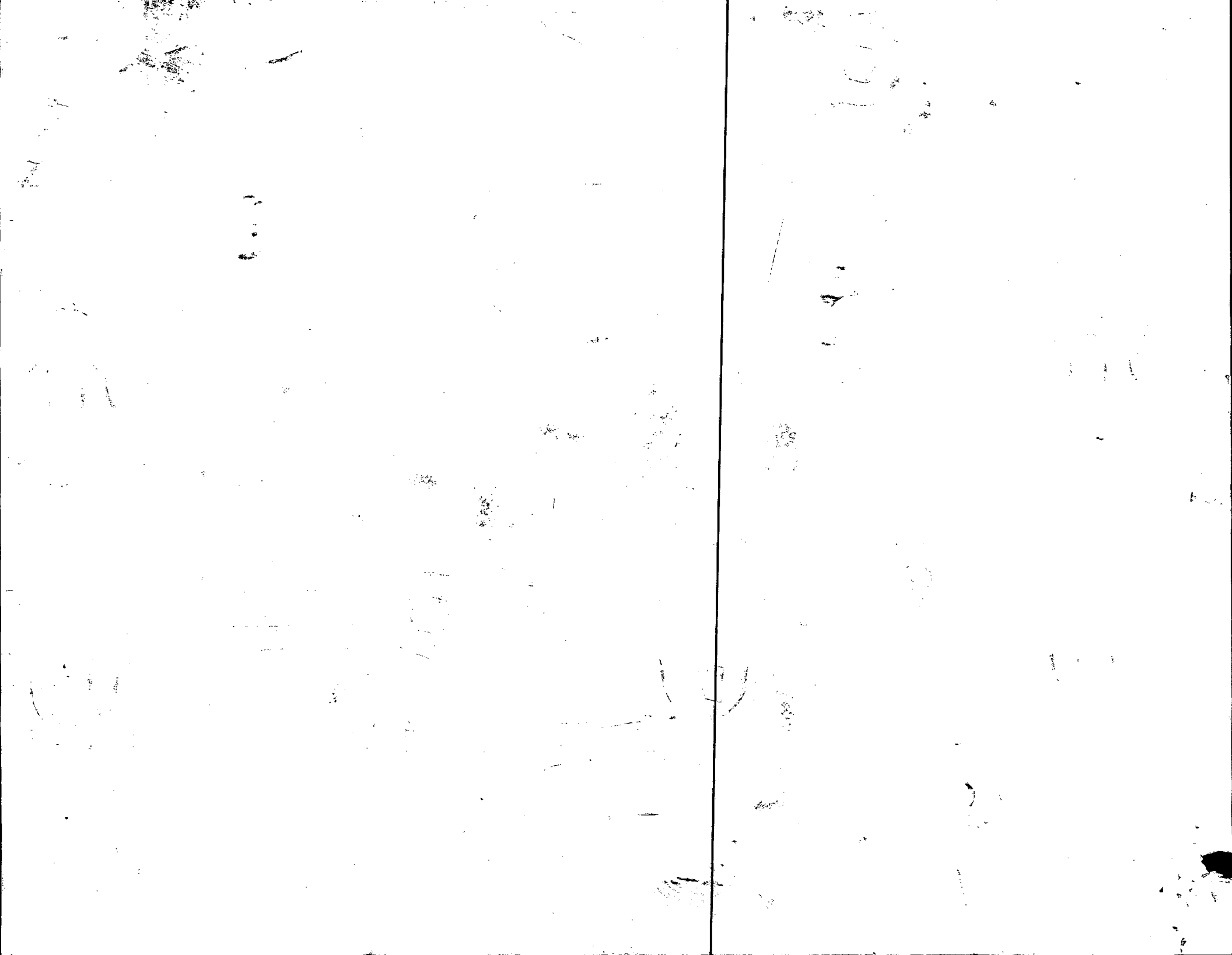
YIELD	GAUGE LENGTH (G.L.)			PLASTIC STRAIN RATIO (r)			IMPACT TEST			CARBON EQUIVALENT VALUE (CE)		
(A)=0.2% PROOF STRESS	(A)=200mm	(C)=80mm	(E)=2"	(A)=r0	(C)=r45		(A)=10mm x 10mm	(C)=5mm x 5mm		(A)=C+Mn/8		(C)=C+Mn/8+Si/24
(B)=LOWER YIELD STRESS	(B)=50mm	(D)=5.65 S ₀	(F)=8"	(B)=r90	(D)=(r0+r90+2r45)/4		(B)=7.5mm x 10mm	(D)=2.5mm x 10mm		(B)=C+Mn/8+(Cr+V+Mo)/5+(Cu+Ni)/15		(D)=

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED *Atish Misra*
QC METALLURGIST

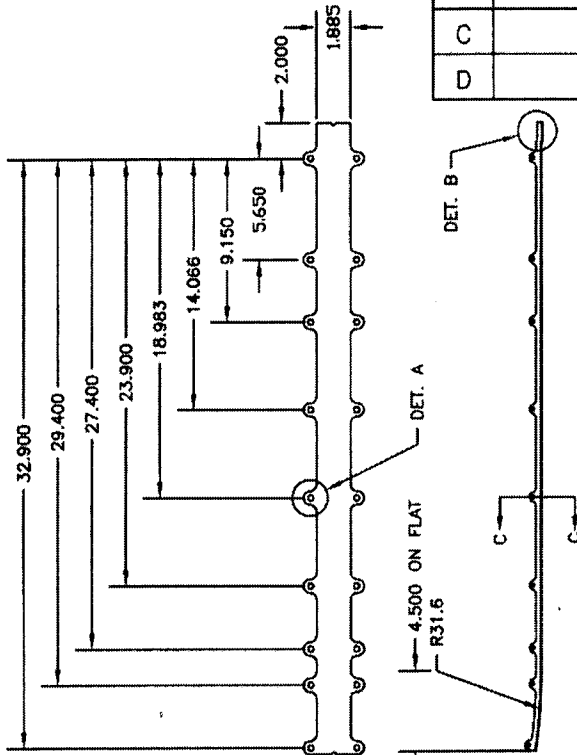
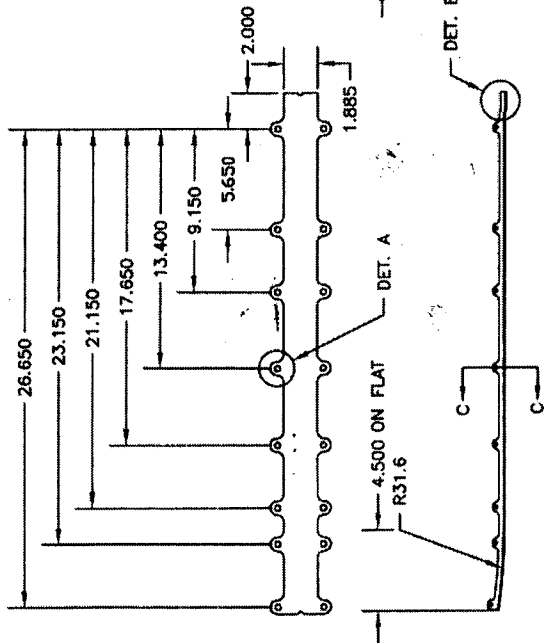
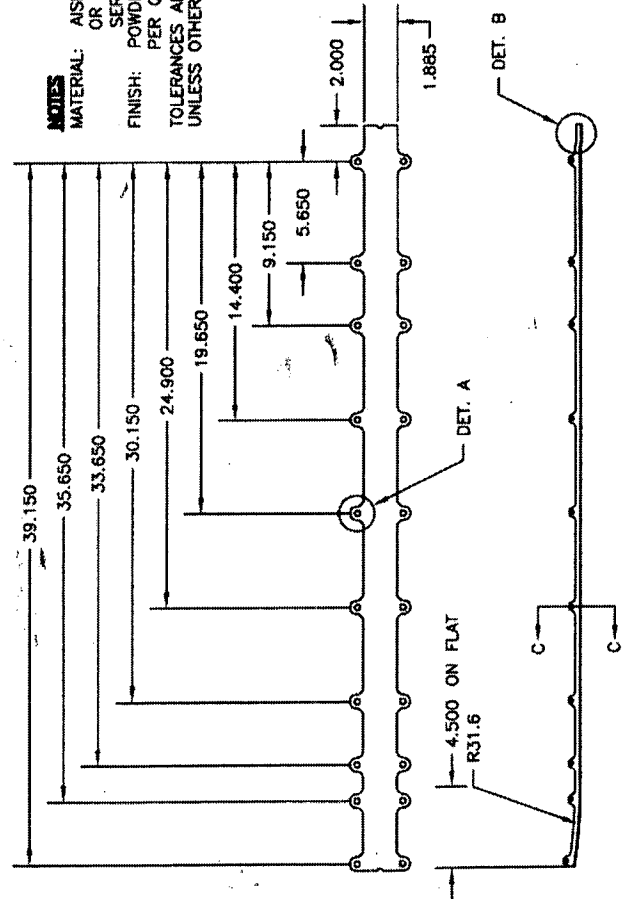
16 ga ms

POA 146, 267, 245,



DART

DESIGN	DS	DRAWN BY	CP	DART AEROSPACE USA, INC.	
				PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	DRAWING NO.	REV. D
				D2656	SHEET 1 OF 4
DATE				TITLE	SCALE
05.08.17				WEARSHOE	1:10
A		97:03:25	NEW ISSUE		
B		97:06:02	CHANGED TABS		
C		97:06:26	R31.6 WAS R19.5		
D		05.08.17	ENLARGE ALL HOLES TO IMPROVE FIT		

D2656-13**D2656-11****D2656-15**

NOTES
MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008
OR CSA G40-21, 38W/44W/50W/60W/70W
SERIES STEEL, 20 GAUGE (0.040 THICK)
FINISH: POWDER COAT GREY SANDTEX (4.3.5.6)
PER QSI 005 4.3
TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED

RELEASED
05-09-08

REFERENCE ONLY

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